WHY BOOSTING YOUR PRODUCTIVITY MATTERS MORE THAN EVER.

Increasing productivity will be crucial to all stakeholders in the load handling industry in the coming years. This white paper explains why and how focusing on productivity will sharpen your competitive edge and improve your profitability.

HIAB

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FOREWORD

Productivity has always played a key role in load handling. But today, it is also a way to stay steady in uncertain times. Improving how we work with the resources we already have isn't just smart – it's crucial.

At Hiab, we believe that productivity is not about pushing the limits by doing things faster and making people work harder. It is finding smarter ways to use time, energy, equipment, and skills by looking at the full picture—how machines, data, people, and services can perform better together.

This white paper explores how, with the right tools and mindset, it is possible to boost productivity and profitability in a world where demands are increasing but margins are not.

We look at the global trends driving the need to raise productivity – from regionalized supply chains to labor shortages, urban density, digital disruption, and economic uncertainty. We also share how Hiab's latest products and solutions can help our customers do more with less.

This white paper is intended for you who work in the load-handling industry and want to stay ahead of competitors by increasing your organization's productivity. Hopefully, it will give you insights valuable in your everyday work.

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WHAT DOES PRODUCTIVITY MEAN?

This white paper explores how a focus on productivity can increase profitability and strengthen your competitive edge. However, the term has become so widely used in our industry that its original meaning is often diluted. Productivity is also frequently confused with efficiency — even though the two are not the same. Let's clarify the definitions of each term and highlight their key differences.

Productivity is maximizing the work done (output) in relation to the resources used (input).[1] It answers the question: *How can we accomplish more with what we already have?*

Productivity focuses on how much value is produced (output) per unit of resources (input) when performing a specific task:

$$\text{Productivity} = \frac{\text{Value (Output)}}{\text{Resources (Input)}}$$

Efficiency is minimizing resource usage (input) while achieving the same work (output).[2] It answers the question: *How can we achieve the same result with fewer resources?*

Key characteristics of efficiency include:

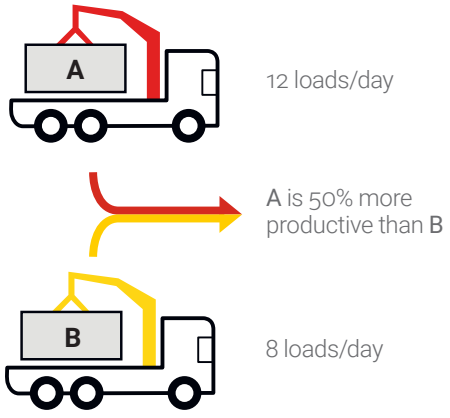
- Minimizing waste of time, money, energy, materials, labor, etc.
- Streamlining processes by avoiding unnecessary actions and complexity.
- Delivering stable and reliable performance with few disruptions.

Productivity = Maximizing output per unit of input

Efficiency = Minimizing input while maintaining output

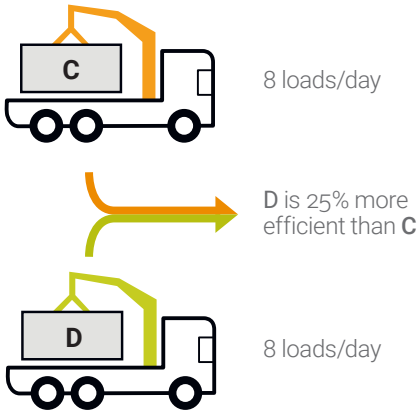
EXAMPLE PRODUCTIVITY

Truck A and Truck B use the same amount of fuel, labor, and equipment. But Truck A completes 12 loads per day, while Truck B completes only 8. That means Truck A is 50% more productive than Truck B. Formula: (12-8)/8 x 100 = 50%



EXAMPLE EFFICIENCY

Truck C and Truck D both complete 8 loads per day and use the same amount of labor. However, Truck D consumes 25% less fuel than Truck C. Hence, Truck D is 25% more efficient than Truck C.



Note: High efficiency doesn't always mean high productivity — and vice versa. A process can be very efficient, using minimal resources, but still produce only a small amount of output. Likewise, an operation can be highly productive, delivering a lot of output, but waste resources in the process. The ideal is to combine both by:

Doing the right things (productivity) **and doing them right** (efficiency)**!**

WHY IMPROVING PRODUCTIVITY MATTERS

Improving productivity has always been a key factor for success in the load handling industry, but it will be even more essential in the coming years. The world is currently experiencing several simultaneous transformations. Below is an overview of those that particularly affect the load handling industry.

▸ **Geopolitical Fragmentation**. *The shift from global to regional supply chains is due to trade tensions, armed conflicts, and near shoring supply strategies.*[3]

That may lead to an increased demand for road-based transport and load handling. However, producing goods regionally is more expensive than overseas in low-wage countries. The increased costs will not be possible to compensate fully by increasing end customer prices. Hence, price pressure will be on suppliers, including stakeholders in the load handling industry. Raising productivity is essential to maintain profitability.

▸ **Labor Shortage**. *Aging populations and declining birth rates are leading to a shrinking workforce in Europe, North America, and parts of Asia-Pacific.*[4]

In 2024, 70% of European trucking companies had severe difficulties filling driver positions due to driver shortages. An increasing shortage of drivers and crane operators means logistics companies must improve productivity by reducing the time spent on loading and unloading.

▸ **Urbanization**. *The development of Smart Cities with emphasis on reduced city emissions with the help of smart logistics.*[5]

In fast-growing cities, limited space, restricted access, and tighter delivery windows require operators to complete more jobs in less time. At the same time, vertical construction and inner-city projects demand faster, more precise deliveries in confined, high-rise settings.

▸ **Digitalization**. *Explosion of AI, IoT, and predictive analytics across industries.*[6]

As IoT and AI-driven monitoring become standard, operators must deliver more with less delay, downtime, and error. The AI boom is driving a surge in data center construction, where large, sensitive components require fast, specialized load handling. Digitalization doesn't just enable higher productivity—it demands it.

▸ **Economic Uncertainty**. *High interest rates, inflation, and energy volatility tighten capital expenditure budgets.*[7]

Economic pressure won't shrink the need for load handling – it will just intensify the need to do it smarter and faster. The industry must deliver higher productivity not through more equipment, but through better utilization, smarter services, and performance-driven innovation.

The average truck driver in Europe is 47 years old. With 33% drivers over 55 and only 5% under 25, too few young people are entering the profession to replace those retiring.[8]

MEASURING PRODUCTIVITY IN THE LOAD HANDLING INDUSTRY

Productivity in the load handling industry is about maximizing output while minimizing resource use — whether that's time, fuel, labor, or equipment wear. Understanding how to measure productivity across different operational areas helps you make informed decisions that reduce costs, and increase profitability. Below are some of the most important areas to track, along with common metrics in each area.

Speed & Cycle Time are commonly measured by tracking the average time from pick-up to drop-off across multiple cycles. Faster cycle times allow more deliveries or load moves per shift, directly boosting revenue and reducing cost per job done.

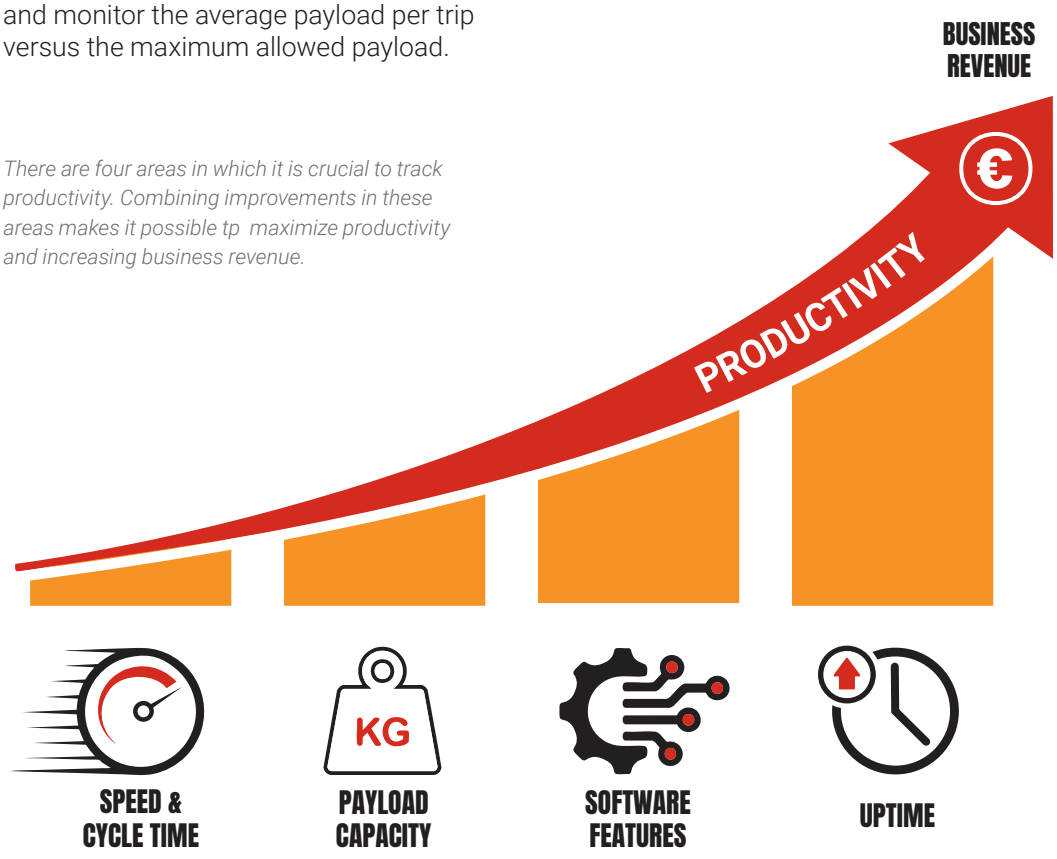
Payload Capacity refers to how much a truck can carry per trip within the legal weight limit. Maximizing payload within those limits reduces the number of trips required, saving time and fuel, and minimizing wear and tear. One way to measure productivity is to compare truck scale measurements (weighbridge data) with the vehicle's legal capacity and monitor the average payload per trip versus the maximum allowed payload.

Software Features include innovative digital tools that increase driver productivity: Driver-assist systems, smart cruise controls, remote controls, etc. It improves handling speed, reduces errors, and decreases operator fatigue, leading to safer, faster, and more productive operations. It is measured with surveys and telematics reports that capture time saved per task using automation.

Uptime refers to the percentage of time a vehicle or crane is operational and ready for use. Higher uptime indicates that the equipment can perform more work, leading to increased revenue and reduced losses from idle time. Uptime is calculated by dividing the planned operational hours by the total number of operational hours, which includes both planned and unplanned downtime. Uptime is measured as follows:

$$\text{Uptime (\%)} = \left(\frac{\text{Planned Opr. Hours- Unplanned Opr.Hours}}{\text{Planned Opr. Hours}} \right) \times 100$$

There are four areas in which it is crucial to track productivity. Combining improvements in these areas makes it possible tp maximize productivity and increasing business revenue.



HOW HIAB CAN BOOST YOUR PRODUCTIVITY

Hiab's mission is to "unlock the full potential of load handling in our customers' businesses." In other words, it is absolutely essential that our products and services help maximizing customers' productivity and profitability.

Hiab pioneered the industry with the hydraulic truck-mounted crane in 1944 and has continued to innovate ever since. In the early years, Hiab focused on optimizing the crane hardware, including the development of the knuckle boom for improved maneuverability. As the design of crane hardware was refined to near perfection, the natural next step was to enhance productivity by developing premium software features and intelligent control systems, which now are standard on our latest generation of HIAB loader cranes. Let us explore and compare the two popular product ranges, HIAB iX.HIDUO and HIAB eX.HIPRO, with a focus on features that directly or indirectly affect their productivity.

HIAB iX.HIDUO – The New Standard
The range is a reliable working horse ideal for general-purpose work, tenders where price and reliability matter, and operations prioritizing cost-efficient productivity. It offers intuitive controls, smart energy-saving systems such as Dynamic RPM and Automatic Start/Stop, and upgraded hydraulics with the Olsbergs V200 valve and Pump Flow Distribution (PFD). Together, these features provide up to 10% energy efficiency improvement compared to the previous generation X-HiDuo, along with smooth and fluid operation that supports faster cycle times and reduced operator fatigue.


The HIAB iX.228 HIDUO in action.

HIAB eX.HIPRO – Unrivalled Performance
Tailored for complex or high-precision jobs, businesses needing multifunction capability. Building on the same core systems as the iX. HIDUO, the eX.HIPRO integrates advanced hydraulic engineering and is uniquely prepared for additional automation features such as Semi-Automatic Motion (SAM), and Crane Tip Control (CTC). With up to 30% energy efficiency gains, reduced pressure drops, and less heat generation, it not only increases performance but also extends component longevity and reduces downtime. Moreover, eX.HIPRO is fully compatible with electric vehicle platforms and hybrid operations—making it future-ready for zero-emission zones.

	HIAB iX.HIDUO	HIAB eX.HIPRO
Control System	SPACEevo, Olsbergs V200 valve (with PFD), and engine control with Dynamic RPM, plus Auto Start/Stop	SPACEevo, Olsbergs V200 valve (with PFD), and engine control with Dynamic RPM, plus Auto Start/Stop and advanced automation features.
Hydraulic Efficiency	+ 10% increase in energy efficiency compared to previous generation X-HiDuo.	+ 30% increase in energy efficiency compared to previous generation X-HiPro.
Automation Features	Semi-Automatic Folding (SAF) and LSS V+H (Load stabilizing system Vertical + Horisontal)	Semi-Automatic Folding (SAF) and LSS V+H (Load stabilizing system Vertical + Horisontal) such automation logic such as SAM and CTC.
Fuel & CO2 Savings	+ Up to 20% fuel savings and CO_2 reduction compared previous generation X-HiDuo.	+ Up to 30% fuel savings and CO^2 reduction compared previous generation X-HiPro.
Uptime & Service	5-year steel structure warranty and 2–3 years on parts, plus proximity to a service network and spare part availability	Same warranty and service structure as iX. HIDUO, but reduced wear due to better pressure and heat control ensures longer lifecycle.
Other	High-speed, smooth operations supported by updated hydraulics and PFD. Suitable for diesel platforms.	Superior speed, responsiveness, and smoothness. Support for EV/hybrid installations.

Productivity-oriented feature comparison HIAB iX.HIDUO versus HIAB eX.HIPRO.

Productivity comparison HIAB iX.188 HIDUO vs HIAB eX.192 HIPRO

Let's explore with an example how it is possible to compare the productivity of two crane models with a simple calculation. In this example, we have chosen to compare two of the most popular cranes in Hiab's new generation model ranges.

HIAB iX.188 HIDUO is a reliable and efficient working horse designed for flexible, everyday use. With features like Start/Stop, Dynamic RPM, and optional variable pump, it helps save fuel. The SPACEevo control system, load stability features such as LSS, and Semi-Automatic Folding (SAF) make operation safe, smooth, and reliable –ideal for versatile jobs where agility and low running costs matter.

HIAB eX.192 HIPRO is built for high-performance work in demanding environments. Its advanced hydraulics and energy-saving features cut fuel use by up to 30% and support both diesel and electric trucks. With SPACEevo controls, the crane handles simultaneous movements with great speed and precision. It is perfect for repetitive or complex tasks where fast cycles, quiet operation, and energy efficiency are key.

In this example, we use **HPI** (Hiab Productivity Index) – a formula designed to compare different crane model's productivity during normal use:

$$HPI = \left(\frac{\text{Speed \& Cycle Time Factor} \times \frac{\text{Lifting Capacity}}{\text{Weight}}}{\text{Planned Operational Time}} \times 100 \right) \times \text{Uptime}$$

The HPI formula is based on the following variables:

- **Speed & Cycle Time Factor:** A model-specific factor unique to each crane model. Hiab has set the factor to 1.0 for the iX.HIDUO model.
- **Lifting capacity (Tm):** Weight the crane can lift one meter from its base. Higher capacity means a more powerful crane.
- **Weight (Tonne):** Crane weight.
- **Planned Operational Time (h):** Average planned crane working hours per day, excluding transportation and preparations.
- **Uptime (%):** Average percentage of actual use versus planned availability.

To the right is a table presenting all the input data and the two calculations.

The HIAB eX.192 HIPRO in action.

	HIAB iX.188 HIDUO	HIAB eX.192 HIPRO
Speed & Cycle Time Factor	1	1, 3
Lifting Capacity (Tm)	15.8 Tm	16.6 Tm
Weight (T)	2,395 T	2,375 T
Planned Operational Time (h)	2 h	2 h
Uptime (%)	95%	95%

HIAB iX.188 HIDUO (Base Line Model):

$$3{,}13 = \left(\frac{1 \times \frac{15.8\ \text{Tm}}{2.395\ \text{T}}}{2\ \text{h}} \times 100 \right) \times 95\%$$

HIAB eX.198 HIPRO:

$$4{,}32 = \left(\frac{1{,}3 \times \frac{16.6\ \text{Tm}}{2.375\ \text{T}}}{2\ \text{h}} \times 100 \right) \times 95\%$$

If we convert the HPI into a relative percentage comparison using the iX.188 HIDUO as the baseline (1.0), the eX.192 HIPRO is approximately 38% more productive.*

This productivity gain is primarily due to advanced software, hydraulic efficiency, increased oil flow, and a higher performance-to-weight ratio, which makes the eX.HIPRO lighter relative to its lifting capacity.

The difference in productivity becomes less significant when performing tasks that do not require maximum performance, e.g. simple drop-off applications. In these cases HIAB iX.188 HIDUO may still be the most suitable crane of choice.

* *Percentage = [(Compared HPI – Baseline HPI) / Baseline HPI] × 100*

HiPerform helps you reach the next level of productivity by maximizing uptime

Maximizing uptime has a major impact on productivity. Optimizing each unit is important, but real-time visibility across your entire fleet is the key to truly boosting productivity. HiPerform combines HiConnect, ProCare, and HiSkill to provide the data, support, and expertise you need to make smarter decisions and drive continuous improvement. Let's explore how these three services can take your productivity to the next level.

HiConnect – Data Driven Productivity

In a fast-changing world, it's crucial to base business decisions on measurable data. HiConnect is a telematics solution that offers near real-time access to data from Hiab equipment. It helps reduce downtime and increase job completion rates by:

+ *Optimizing usage:* Identify under- or over-utilization of assets.
+ *Reducing idle time*: Spot inefficiencies in daily operations.
+ *Enabling proactivity:* Use trend data to plan service, upgrades, and replacements.
+ *Increasing safety*: Monitor risky operator behavior and take corrective actions.

ProCare – Predictable Uptime

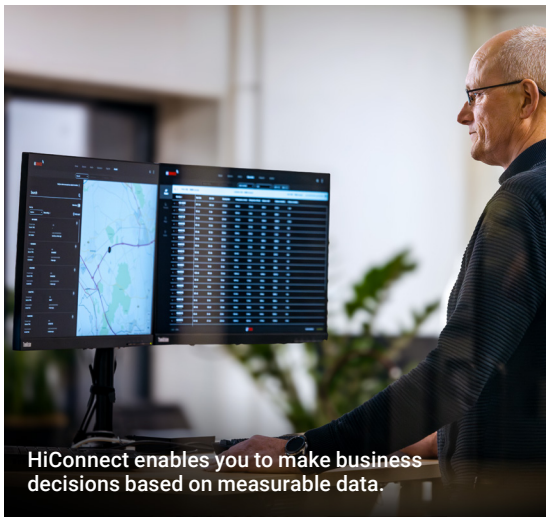
ProCare is a fixed-fee service contract that ensures preventive maintenance, inspections, and in some cases, repairs—performed by certified technicians using original parts. It improves equipment availability by:

+ *Preventing breakdowns:* Address issues before they lead to downtime.
+ *Extending lifespan:* Proper care results in longer-lasting equipment.
+ *Improving cost control:* Fixed service fees reduce unexpected repair costs.
+ *Ensuring compliance:* Meet safety standards through scheduled inspections.

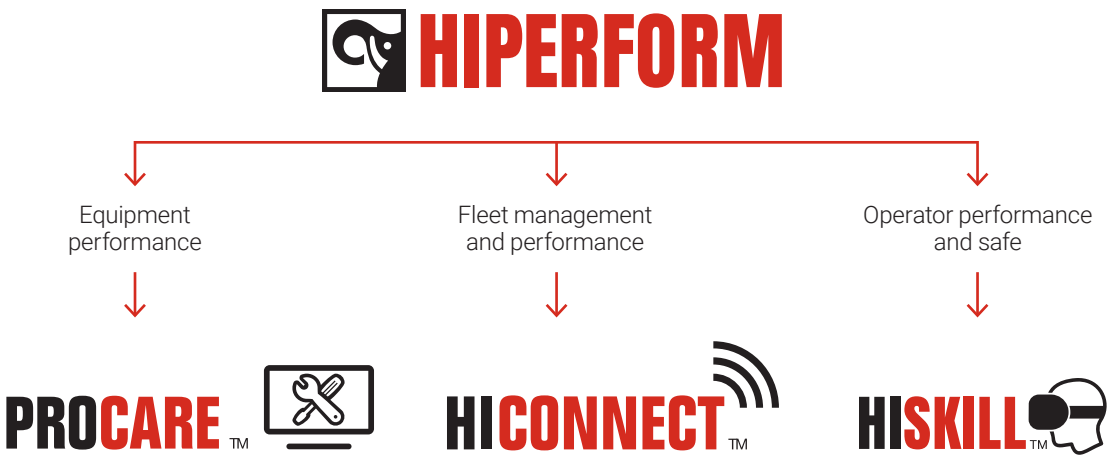
HiSkill – Operator Excellence

It is a virtual reality training simulator designed to train both new and experienced crane operators in a safe, scalable, and cost-effective way. It maximizes human performance by:

+ *Improving efficiency:* Skilled operators work faster and more precisely.
+ *Reduce wear and tear:* Correct techniques mean less strain on equipment.
+ *Enhance safety:* Fewer accidents lead to fewer delays and lower insurance risks.
+ *Lowering training costs:* Training costs can be reduced by up to 50%, while freeing up equipment for revenue-generating work.



HiConnect enables you to make business decisions based on measurable data.



HiPerform is a smart solution suite designed to optimize customer performance, productivity, and lifecycle value.

CONCLUSION

If you only take away one insight from this white paper, we hope it's this: Productivity is no longer optional. It's the difference between growth and stagnation, profit and loss.

Yes, the world is changing. Sustainability regulations are getting stricter. Skilled drivers are becoming harder to find. The economy remains unpredictable. But these challenges aren't new. What has changed is the accelerating pace – and the shrinking margin for error.

What are the first steps to boost productivity? You don't need more gear. You need smarter gear. You don't need more people. You need to empower the people you already have to get more done. Hiab's approach to help increasing customers' productivity combines high-performance equipment, intelligent features, digital services, and operator training into one integrated system. The goal isn't just to meet today's demands – but to prepare you for tomorrow's.

The most valuable thing Hiab offers isn't just cranes — it's the knowledge and dedication of our people, helping you find exactly the right tool for the job. Sometimes that means recommending a HIAB iX.HIDUO crane over an eX.HIPRO — not because one is better than the other, but because every job has its own demands. Both are premium cranes, but not every task requires the full feature set of the most advanced model. It's about finding the perfect match between equipment and need. That's how we build lasting relationships — by focusing on what helps you succeed. And when you succeed, so do we. Always.

So, how can Hiab help boost your productivity and long-term profitability?

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BUILT TO PERFORM

Hiab (Nasdaq Helsinki: HIAB) is a leading provider of smart and sustainable on road load-handling solutions, committed to delivering the best customer experience every day with the most engaged people and partners. Hiab's premium equipment includes HIAB, EFFER and ARGOS loader cranes, MOFFETT and PRINCETON truck mounted forklifts, LOGLIFT forestry cranes, JONSERED recycling cranes, MULTILIFT skiploaders and hooklifts, GALFAB roll-off cable hoists, ZEPRO, DEL and WALTCO tail lifts, and the service brand HIPERFORM, a comprehensive suite of smart solutions that help maximise the life-cycle value of Hiab's equipment.

As the industry pioneer, Hiab continues to make on road load-handling smarter, safer and more sustainable to build a better tomorrow. Globally, Hiab is represented on every continent through its extensive network of 3,000 own and partner sales and service locations, enabling delivery to over 100 countries. The company's continuing operations sales in 2024 totalled approximately EUR 1.6 billion and it employs over 4,000 people.

HIAB

www.hiabgroup.com

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